USB 2.0 SLIM DVD WRITER

Supports DVD±R/RW and DVD-RAM writing

User's Manual

CAUTION
CLASS 3B VISIBLE AND INVISIBLE LASER RADIATION WHEN OPEN.
AVOID DIRECT EXPOSURE TO BEAM.
VORSICHT
KLASSE 3B SICHTBARE UND UNSICHTBARE LASERSTRAHLUNG WENN GEOFFNET. NICHT IN DEN STRAHL SEHEN.
ATTENTION
RADIATION DU FAISCEAU LASER VISIBLES ET INVISIBLES DE CLASSE 3B EN CAS D'OUVERTURE. EVITER TOUTE EXPOSITION AUX RAYONS.

Copyright Statement

It is a criminal offence, under applicable copyright laws, to make unauthorised copies of copyright-protected material, including computer programs, films, broadcasts and sound recordings. This equipment should not be used for such purposes.

FCC Compliance Statement

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

FCC Warning Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to correct the interference by one or more of the following measures:

Reorient or relocate the receiving antenna

Increase the separation between the equipment and the receiver

Connect the equipment into an outlet on a circuit different from that to which the receiver is connected

Consult the dealer or an experienced radio/TV technician for help.

CAUTION

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

FOR EUROPE

CE "The drive is in conformity with the EMC directive and low-voltage directive."

WEEE LOGO

Disposal of Old Electrical & Electronic Equipment (Applicable in the European Union and other European countries with separate collection systems)

This symbol on the product or on its packaging indicates that this product shall not be treated as household waste. Instead it shall be handed over to the applicable collection point for the recycling of electrical and electronic equipment. By ensuring this product is disposed of correctly, you will help prevent potential negative consequences for the environment and human health, which could otherwise be caused by inappropriate waste handling of this product. The recycling of materials will help to conserve natural resources. For more detailed information about recycling of this product, please contact your local city office, your household waste disposal service or the shop where you purchased the product.

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INTRODUCTION

Features

Accompanying the new DVD storage technology, we are honored to present you a compact and multiformat external drive with USB 2.0 interface: 8X Slim DVD Writer which supports DVD±R/RW, and DVD-RAM writing.

This Slim DVD Writer frees up precious bay space and offers more backup choices other than acting as a CD-R/RW drive and as a DVD-ROM reader. It supports formats of DVD+R/RW, DVD-R/RW and DVD-RAM enabling excellent compatibility, simple, quick recording of both CD and DVD formats, huge capacity storage, and theater-quality playback.

The bundled package of mastering software offers the creating fun of video, photos, and music editing. You can either record up to 4.7GB, 3 hours of TV shows or movies into high-quality DVD video, or author your own DVD movies – from capture to editing and burning, which both are playable in most DVD players and DVD-ROM drives.

Handy and easy to use, this Slim Writer is an ideal model to enjoy the fascinating DVD entertainment on your desktop and here are some more important features:

Here are some important features of thiswriter:

- Slim type for mobile office use
- USB 2.0 interface, easy to connect USB 2.0 port in Notebook or PC
- 8X DVD+R, 8X DVD-R, 2.4X DVD+R DL, 2X DVD-R DL writing, 4X DVD+RW, 4X DVD-RW, 3-5X DVD-RAM rewriting, and 8X DVD-ROM reading speed
- 24X CD-R writing, 10X CD-RW rewriting, and 24X CD-ROM reading speed
- Adopts “SmoothLink” technology to prevent buffer underrun error
- Supports writing modes of TAO, DAO, SAO and packet writing

- Supports MultiRead function
- Serves as RPC-2 DVD-ROM Drive
- Smooth DVD playback
- Compatible with most existing DVD-ROM drives and DVD video players
- Bundled with an extensive software package

About USB

USB (Universal Serial Bus), a means of attaching devices to your computer, is basically a standardized intelligent serial connection which provides an expandable, hot-pluggable*[1] interface. Devices suitable for USB range from simple items like mice and keyboards to more complicated devices like printers, MP3 players, and storage devices. One other benefit of USB is plug and play. That is, when you plug the USB device in, it is automatically detected, drivers installed and then ready for operation.

USB 2.0 supports data transfer at rate up to 480Mbps for high-speed devices. It is backward compatible with USB 1.1*[2] software and peripherals. If your computer doesn't have a built-in USB 2.0 port, you need to install a USB 2.0 PCI host card in your pc for the drive to run at USB 2.0 speed. Otherwise, this DVD writer will run at standard USB speed.

*[1] You can connect and disconnect devices while the computer is running.

*[2] USB 1.1 can transfer data at rate up to 12Mbps.

System Requirements

For IBM compatible PCs, the system requirements recommended are as follows:

- Pentium III, 850MHz or above with at least 256MB of memory
- Minimum 1GB free Hard Disk space
- Operating system: Microsoft Windows 98SE/ME/2000/XP
- USB 2.0 PCI host card (If there's no USB 2.0 built-in port in the PC.)

☞ *We recommend that you use motherboards with built-in USB 2.0 connectors. If USB 2.0 host card is used, the reading speed of DVD might be influenced.*

Package Contents

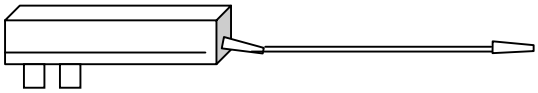
- USB 2.0 Slim DVD Writer
- Power adapter
- USB 2.0 cable
- Application software discs
- Quick Installation Guide

INSTALLATION

Hardware Installation

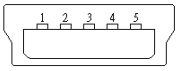
1. Connect the power adapter to the drive.

External Power



AC IN 100-240V DC OUT + 5V

2. Attach the USB 2.0 cable to the mini USB 2.0 connector on the rear panel of the drive.



USB Connector

3. Attach the other end of the USB 2.0 cable to the USB port in your computer. The drive is now ready to use.

☞ *If you are installing a USB 2.0 drive, your computer must have a USB 2.0 port to reach the highest speed. You may experience slower USB 2.0 drive performance if it is connected to an USB 1.1 port.*

Note:

- Be sure to use the USB 2.0 cable & the power adapter (DC IN + 5V) bundled with the drive.
- Never plug or unplug in any other USB device while the drive is transferring data. It's likely to lose data.
- It's advisable not to disconnect the drive or unplug the power to the drive while a disc is inserted.
- Do not connect more than two rewritable optical drives to USB ports of the computer.

Driver Installation

Windows Environment

This Slim DVD Writer is a PnP (Plug and Play) device, and Windows ME/2000/XP can **automatically detect** the drive and load the appropriate driver.

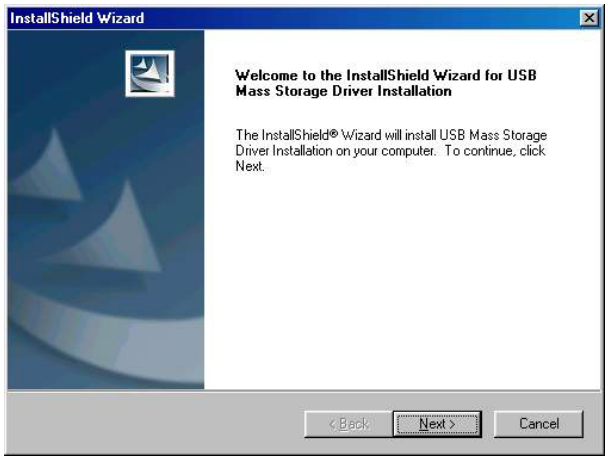
For the users who use Windows 98SE, it is required to install the provided driver included in the application software disc.

How to install on Windows 98SE

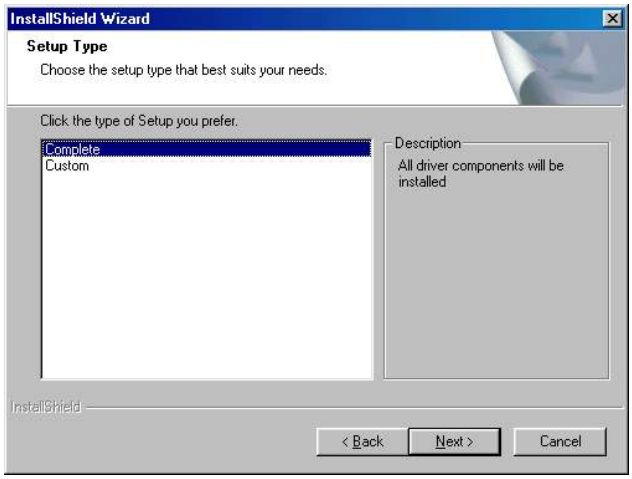
Please follow the steps below for first time installation of the USB 2.0 device. After the successful installation, you can re-connect the device and the system should automatically recognize the attached USB 2.0 Device:

Step 1 **Insert the software CD-ROM. Select the CD-ROM icon,** "Drivers\USB External Driver\Slim External Series\setup.exe"

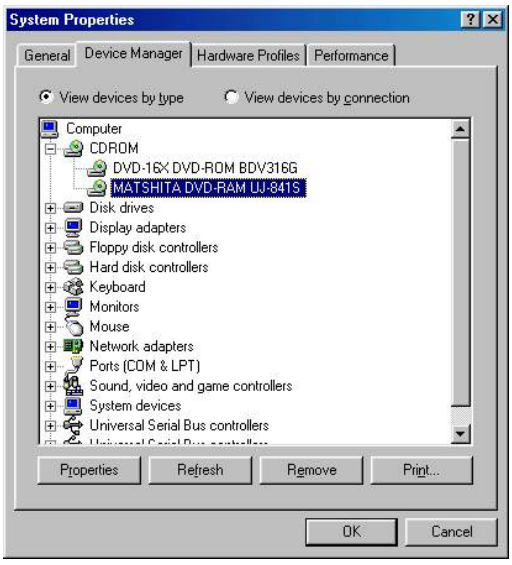
Run "setup.exe" and then click [**Next**]


InstallShield Wizard
Welcome to the InstallShield Wizard for USB Mass Storage Driver Installation
The InstallShield® Wizard will install USB Mass Storage Driver Installation on your computer. To continue, click Next.
< Back
Next >
Cancel

Step 2
Choose “Complete” and click “Next.” Installation is finished.



Step 3
After connecting the slim DVD writer, there will be a string, “MATSHITA DVD-RAM UJ-841S”, shown under device manager.



Application Software

Installation Under Windows Environment

1. Insert the application CD and the installation program will run automatically. Then follow the on-screen procedures.

Or

2. Run**:\setup.exe** on the application CD.

Burning Software

The bundled recording software gives you the complete solution for making audio/data CD/DVDs. With the user-friendly interface, it guides you through the creation and backup of files / photos / video / music from your computer to a recordable disc.

DVD Playback Software

The DVD playback software comes with leading video and audio technologies to deliver the highest sound and visual effect possible on the PC. Meanwhile, it offers feature-rich navigation controls for an interactive and tailored DVD movie viewing experience. You can enjoy the wide range of educational and entertaining DVD titles with theater quality.

DVD Regional Code

Region Playback Control Management

All DVD Video Playback systems have “Region Playback Control” management (RPC) which is required by Hollywood movie industry and defined by DVD Forum. This includes DVD-Video players and PC systems with DVD-Video capability. You can only play DVD-Video discs with the same regional code as your DVD-Video Playback system.

As for DVD-ROM drives, one kind of the DVD-Video Playback system, there are 2 types:

RPC Phase 1 (as RPC1): RPC1 drives do not have built-in hardware support for region management. DVD-ROM drives of this kind do not play a part in controlling the playback region. It solely depends on the decoder.

RPC Phase 2 (as RPC2): RPC2 drives maintain the regional code change count information in hardware, and in general, the regional code of such drives can be changed up to 5 times by the end users under some software decoder (e.g. PowerDVD).

And referring to the regional codes, there are 6 regions worldwide, and normally, there is a regional code mark on the package of DVD titles. :

Region **1**: Canada, US

Region **2**: Japan, Europe, South Africa, and Middle East (including Egypt)

Region **3**: Southeast Asia and East Asia (including Hong Kong)

Region **4**: Australia, New Zealand, Pacific Islands, Central America, Mexico, South America, and the Caribbean

Region **5**: Eastern Europe, Indian subcontinent, Africa, North Korea, and Mongolia

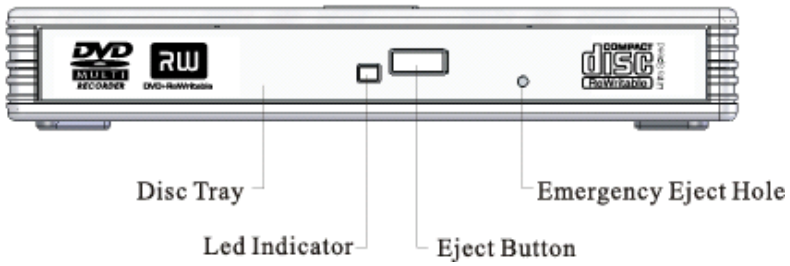
Region **6**: China

About This Drive

This drive is also a RPC2 DVD-ROM drive and according to DVD-Forum, PC chip must be designed into DVD-ROM drives to record how many times a user has changed the regional code. The first regional code will depend on the DVD title you play and you are allowed to modify the regional code 5 times (including the initial one). After the fifth alteration, the regional code will be locked and only those DVD titles of the same regional code could be played afterwards, so set the code carefully.

OPERATION & CONNECTION

Front Panel



1. Disc Tray

This is the tray for the disc. Place the disc in the tray, then press the Close/Eject button or gently push the tray to close it.

2. LED Indicator

While the tray goes in or out, the LED indicator flashes and it's off when the drive is ready or detects no disc inserted. When the drive is reading or writing data, the LED indicator lights up.

3. Close/Eject button

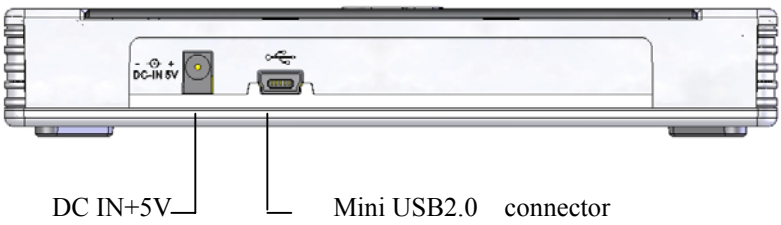
This button is used to open and close the disc tray. If the tray is closed, pressing the button will eject it.

4. Emergency Eject Hole

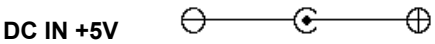
When the Eject/Close button can't work properly and the disc tray can't be opened, you can insert a paper clip or other small rod into this hole for manual ejection. Please make sure to power off the system before you do that.

☞ ***Note:*** *The design of front panel is subject to change without notice.*

Rear View



1. DC Jack



2. Mini USB 2.0 Connector

Connecting with USB 2.0 cable.

TECHNICAL DATA

Interface	USB 2.0
Disc Capacity	DVD±R/RW: Single layer 4.7GB, Double layer 8.5GB DVD-RAM: 4.7GB CD-R/RW: 74min/650MB, 80min/700MB
Media supported for Writing	CD-R, CD-RW, HS-RW, US-RW DVD±R, DVD±RW, DVD±R DL, DVD-RAM
Applicable disc Formats	DVD±R, DVD±RW, DVD-ROM, DVD-Video, CD-DA, CD-ROM, CD-ROM XA, CD-Extra, CD-I, Mixed-Mode CD, Video CD, Photo CD, CD-Text, Bootable CD, Multi-Session
Writing modes	Track at Once, Disc at Once, Session at Once, Multi-Session, Packet Writing
Maximum Writing Speed	**DVD±R:** 8X **DVD+R DL:** 2.4X **DVD-R DL:** 2X **DVD±RW:** 4X **DVD-RAM:** 3X－5X **CD-R:** 24X **CD-RW:** 10X
Reading Compatibility	CD Audio, CD-Extra, CD-ROM/XA, CD-I, Photo CD, Video CD, CD-Text, DVD-ROM, DVD+/-R, DVD+/-RW
Reading Speed	**CD-ROM:** max. 24X **DVD-ROM:** max. 8X
Data Transfer Rate	**CD－Read** CD-ROM: 3600KB/sec (up to 24X)

	CD -- **Write** CD-R: 3600KB/sec (up to 24X) CD-RW: 3600KB/sec (up to 24X) **DVD**－**Read** DVD-ROM: 10800KB/sec (up to 8X) **DVD** -- **Write** DVD+R: 10816KB/sec (up to 8X) DVD-R: 10816KB/sec (up to 8X) DVD+RW: 5408KB/sec (up to 4X) DVD-RW: 5408KB/sec (up to 4X) DVD-RAM: 6750KB/sec (up to 5X)
Access time	**DVD:** 180ms (Typ.) Random **CD:** 150ms(Typ.) Random
Data buffer	2MB
Disc loading	Tray (Electrical release/manual load)
Dimensions	Height: 21.0 ± 1mm Width: 140.0 ± 1mm Depth: 152.0 ± 1mm
Weight (Drive only)	411g ± 10g
Mounting Method	Horizontal
Power Requirement	input: AC 100~240V, 50/60Hz output: 5V 2A

3100553192
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